



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/603,925

06/24/2003

Basil Treppa

059864.00842

4336

32294

7590

02/25/2009

SQUIRE, SANDERS & DEMPSEY L.L.P.

8000 TOWERS CRESCENT DRIVE

14TH FLOOR

VIENNA, VA 22182-6212

EXAMINER

HIGA, BRENDAN Y

ART UNIT

PAPER NUMBER

2453

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/603,925	Applicant(s) TREPPA ET AL.	
	Examiner BRENDAN Y. HIGA	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-20, 22-25 and 27-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-20, 22-25, 27-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn

Claims 1-9, 11-20, 22-25 and 27-34 remain pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-20, 22-25, 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruck et al. (US 6691165) ("Bruck"), in further view of Sato (US 7,277,935) ("Sato"), in further view of McLaughlin et al. (US 2002/0165929) ("McLauhlin").

As per claim 1, Bruck teaches a system comprising: a network interface configured to communicate with nodes in a cluster (Fig. 6, ref. 614); a configuration subsystem coupled to a remote management broker (read as the single-point, see above, col. 3, lines 64-67), wherein the remote management broker is configured to distribute information between the nodes in the cluster (see col. 3, lines 45-55, 64-67

and col. 28, lines 2-16); a processor configured to perform actions, including: access the cluster from a single-point (single-point, see col. 3, lines 64-67); obtain information relating to at least two devices within the cluster (see Fig. 12 and col. 21, lines 55-60, wherein remote management console monitors multiple server computers from a single interface); present the information to a user (see col. 3, lines 64-67); and determine network management (NM) operations to perform to the cluster (col. 21, line 66-col. 22, lines 13); perform the determined NM operations (col. 21, line 66-col. 22, lines 13);

Bruck does not expressly teach determining whether the network management operations on the cluster, including said at least two devices, were applied correctly, and when the network management operations were not applied correctly, the processor is configured to roll back to a successful configuration.

However, in the same art of network management and configuring, Sato teaches, a management system for configuring network devices (see abstract and Fig. 13A-13B), wherein, after configuration changes are made to the network device, a determination is made as to whether a network device has failed, whereby a network management device (see Fig. 13) then transmits original configuration information to restore the network device to a prior configuration (see col. 16, lines 10-17).

One of skill in the art would have been motivated to combine the teachings of Bruck with the teachings of Sato, for determining if network management operations on at least two devices, were applied correctly, and if not, rolling back to a successful configuration, in order to allow Bruck's system to recover from an error state.

Furthermore, Bruck does not expressly teach applying a configuration lock that is intended to prevent other applications from performing network management operations on the at least two devices within a cluster.

However, in the same art of server cluster management, McLaughlin teaches a system for performing network maintenance on a plurality of network resources within a cluster (see Fig. 1 and abstract). The system further allows for the locking of the network resources by a client while the network maintenance operations are being performed (see ¶0136-¶0144).

One of ordinary skill in the art would have been motivated to apply the teachings of Bruck with the teachings of McLaughlin for applying a configuration lock on the at least two devices in the cluster. The motivation for doing so would have been to prevent other applications from interfering with the network management operations at the two network devices (see McLaughlin, ¶0136-¶0144).

As per claim 2, Bruck further teaches the processor is configured to provide a command line interface configured to access the cluster (see col. 4, lines 1-4)

As per claim 3, Bruck further teaches the processor is configured to provide a graphical user interface that is configured to access the cluster (see col. 4, lines 1-4).

As per claim 4, Bruck further teaches wherein the processor is configured to aggregate data relating to the devices within the cluster (see Fig. 12 and 13, read as an aggregate of data relating to devices within the cluster).

As per claim 5, Bruck further teaches a secure transport configured to transport messages (see Secure Socket Layer, col. 27, lines 55-59); a remote management broker server (see, Fig. 7, ref. 1703 and single-point, col. 3, lines 64-67) coupled to the secure transport (col. 27, lines 55-59); and a Remote Management Brick client coupled (see controller, i.e. internet browser application, Fig. 17, ref. 1702) to the secure transport (col. 27, lines 55-59).

As per claim 6, Bruck further teaches wherein the Remote Management Broker is further configured to collect attributes from the Configuration Subsystem (see col. 3, lines 45-55, read as collecting management information from cluster servers).

As per claim 7, Bruck further teaches wherein the messages include a header that is configured to authenticate the messages ("state sharing information messages", see col. 10, lines 9-18, including a "membership field", col. 10, lines 53-64).

As per claim 8, Bruck further teaches wherein a magic field that identifies one or more of the messages as a remote management broker message (see "Signal Type", col. 10, lines 19-38, which identifies the type of message read as a "magic field").

Furthermore, although Bruck teaches using the SSL protocol in the system (see Secure Socket Layer, col. 27, lines 55-59), as best understood, it is not necessarily the case that SSL protocol is being used to distribute the “state sharing information messages” (see col. 10, lines 9-18, read as “the messages”) throughout the cluster network. Thus, it is not necessarily the case that the state sharing information message header includes a message authentication code. However, the examiner takes official notice of this limitation. The SSL protocol was well known in the art at the time of the invention, (see Hickman, Kipp, “The SSL protocol”, November 29, 1994), which includes a Message Authentication Code, “MAC-DATA”, that acts as a shared secret (see Hickman, Kipp, “The SSL protocol” §1.2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to distribute the “state sharing information messages” using the SSL protocol, in order to provide a secure method of distributing messages within the server cluster.

As per claim 16 the combination of Bruck, Sato, and McLauhglin teaches the invention substantially as claimed as noted above. Furthermore, McLaughlin teaches applying a configuration lock that is intended to prevent other applications from performing network management operations on the devices within the cluster (see abstract and ¶¶0137-0144) during a predetermined time (see ¶¶0199 wherein the lock client process 18 sets a timer for the length of the “retain interval”, wherein the length of the retain interval is read as a predetermined time); and releasing the configuration lock after the network management operations are performed (see ¶¶0199 “lock release”).

The same motivation that was utilized for combining Bruck and McLauhglin in claim 1 applies equally well to claim 16.

As per claim 30, the combination of Bruck, Sato and McLaughlin teaches the invention substantially as claimed as noted above. Furthermore, Bruck teaches receiving input from the user relating to the attributes and wherein the network management operations are based on the received input (see col. 3, lines 64-col. 4, line 4).

Claims 9, 11-15, 17-20, 22-25 and 27-29 and 31-34 are rejected under the same rationale as claims 1-8, 16 and 30 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

Response to Arguments

Applicant's arguments with respect to claims 1-9, 11-20, 22-25, 27-34 have been considered but are not persuasive.

With respect to applicant's arguments against the combination of Sato (US 7,277,935) ("Sato") for curing the deficiencies of McLaughlin (US 2002/0165929) ("McLaughlin") in view of Bruck (US 6691165) ("Bruck"), the examiner respectfully disagrees.

The applicant's reasoning is based on two arguments against the combination of the Sato reference including (1) "*Sato generally discusses managing a network device,*

but does not discuss such management in the context of a cluster” (see page 22) and (2) “claim 1, recites rolling back to a previous, successful configuration, whereas Sato merely discusses restoring parameters of an initial firmware configuration” (see page 21).

In response to the former argument, as evidence by the fact that all three prior art references are classified in the same field of endeavor (i.e. 709 "multicomputer data transferring"), it would suggest that the teachings of Sato would not have been outside the scope of a person of ordinary skill in the art of computer networking even though, as suggested by the applicant, Sato may not use the term “cluster” explicitly in his reference.

However, assuming *arguendo*, that Sato is arguably outside the scope of McLaughlin in view of Bruck, as noted by the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), “When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement predictable variations, §103 likely bars its patentability” *Id.* at 411 (emphasis added).

Here, Sato teaches an implicit design incentive in restoring a network device to an original configuration (see col. 16, line 10-15), in that it allows a failed device to continue operations using an original configuration in a “non-clustered system”. Furthermore, there does not appear to be any technological barrier that would have prevented a person of ordinary skill in the art from applying the teachings of Sato to a “clustered system” as taught by McLaughlin and Bruck. Thus, according to the Supreme

Art Unit: 2453

Court in *KSR*, §103 likely bars patentability, since, one of ordinary skill in the art would have achieved a predictable benefit in applying the teachings of Sato with the teachings of McLaughlin and Bruck, in that it would have allowed a failed network device, in a clustered system, to continue operations using an original configuration.

In response to the applicant's later argument, if not explicitly stated in Sato, then it is implicit that the original configuration information must be a successful configuration. Assuming that the applicant is reading the original configuration information in Sato as an unsuccessful configuration, you would have the situation of a system sending an unsuccessful configuration to restore a failed device, which would effectively defeat the purpose of Sato's invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2453

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENDAN Y. HIGA whose telephone number is (571)272-5823. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brendan Y Higa/
Examiner, Art Unit 2453

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457